CURRICULUM FOR COMPUTER SCIENCE
WITH CN YANG SCHOLARS PROGRAMME
(FIRST YEAR ADMISSION)
AY2025 Intake Onwards

SUMMARY OF ACADEMIC UNIT REQUIREMENT							
	Major Requirements			Interdisciplinary Collaborative Core			
Year of Study	School Core	CNYSP-Core	MPE	CC	Professional Series	Care, Serve, Learn	BDE	Total AU
1	9	27	0	4	3	0	3	46
2	18	6	0	6	0	3	4	37
3	16	0	12	0	6	0	0	34
4	8	0	12	0	0	0	3	23
Total	51	33	24	10	9	3	10	140

YEAR 1 SEMESTER 1				
Course Code	Course Title	Type	AU	Pre-Requisite/Remarks
CY1001	Cell	CNY-Core	3	CNYSP Courses
CY1101	Molecule	CNY-Core	4	
CY1308	Physics	CNY-Core	3	
CY1500	Introduction to Research	CNY-Core	2	
CY1601	Mathematics I	CNY-Core	4	
SC1003	Introduction to Computational Thinking and Programming	PS	3	
CC0015	Healthy Living & Wellbeing	CC	2	
			21	

YEAR 1 SEMESTER 2				
Course Code	Course Title	Type	AU	Pre-Requisite/Remarks
CY1007	Climate Change	CNY-Core	3	CNYSP Courses
CY1602	Mathematics II	CNY-Core	4	
SC1005	Digital Logic	C	3	
SC1006	Computer Organisation & Architecture	C	3	SC1005 (co-requisite)
SC1007	Data Structures and Algorithms	C	3	SC1003
ML0004	Career Design & Workplace Readiness in the V.U.C.A World	CC	2	
XXXXXX	Broadening and Deepening Elective 1	BDE	3	
			21	

YEAR 1 SPECIAL SEMESTER				
Course Code	Course Title	Type	AU	Pre-Requisite/Remarks
CY2003	Research Attachment 3	CNY-Core	4	CNYSP Course
	Overseas Learning Trip			
			4	

YEAR 2 SEMESTER 1				
Course Code	Course Title	Type	AU	Pre-Requisite/Remarks
CY0001	Writing Across the Disciplines	CNY-Core	3	CNYSP Course
SC5915	Undergraduate Research	BDE	IP	Course will be registered in Semester 2. Grades will be recorded at the end of Semester 2
SC1008	C and C++ Programming	C	3	SC1003
SC2000	Probability and Statistics for Computing	C	3	
SC2002	Object Oriented Design & Programming	C	3	SC1003 OR SC1007
MH1812	Discrete Mathematics	C	3	
SP0061	Science & Technology for Humanity	CC	3	
	Tech-For-Good (T4G)	CSL	3	Replaces Care, Serve, Learn
			21	

YEAR 2 SEMESTER 2				
Course Code	Course Title	Type	AU	Pre-Requisite/Remarks
CY0002	Ethics	CNY-Core	3	CNYSP Course
SC5915	Undergraduate Research	BDE	4	2-semester long, course registered only in Sem 2 (similar to URECA)

Course Code	Course Title	Type	AU	Pre-Requisite/Remarks
SC2001	Algorithm Design and Analysis	C	3	SC1007 & MH1812
SC2005	Operating Systems	C	3	SC1006 & SC1007
CC0006	Sustainability: Society, Economy & Environment	CC	3	
			16	

YEAR 3 SEMESTER 1				
Course Code	**Course Title**	**Type**	**AU**	**Pre-Requisite/Remarks**
SC2006	Software Engineering	C	3	SC2002
SC2008	Computer Networks	C	3	SC2000 & SC1004
SC2203	Automata. Computability and Complexity	C	3	SC2001
SC2207	Introduction to Databases	C	3	SC2001
SC2079	Multidisciplinary Design Project	C	4	Year 3 Standing
MLXXXX	Profession Preparation	PS	1	
			17	

YEAR 3 SEMESTER 2				
Course Code	**Course Title**	**Type**	**AU**	**Pre-Requisite/Remarks**
SC3XXX/SC4XXX	Major Prescribe Elective (Choose within SC3xxx/SC4xxx)	MPE	3	Year 3 Standing
SC3XXX/SC4XXX	Major Prescribe Elective (Choose within SC3xxx/SC4xxx)	MPE	3	Year 3 Standing
SC3XXX/SC4XXX	Major Prescribe Elective (Choose within SC3xxx/SC4xxx)	MPE	3	Year 3 Standing
SC3XXX/SC4XXX	Major Prescribe Elective (Choose within SC3xxx/SC4xxx)	MPE	3	Year 3 Standing
			12	

YEAR 3 SPECIAL SEMESTER				
Course Code	**Course Title**	**Type**	**AU**	**Pre-Requisite/Remarks**
SC3910	Professional Attachment	PS	5	
			5	

YEAR 4 SEMESTER 1				
Course Code	**Course Title**	**Type**	**AU**	**Pre-Requisite/Remarks**
SC4211	CNYSP Overseas Final Year Project	C	8	CNYSP Course
			8	

YEAR 4 SEMESTER 2				
Course Code	**Course Title**	**Type**	**AU**	**Pre-Requisite/Remarks**
SC4XXX	Major Prescribe Elective (Choose within SC4xxx)	MPE	3	Year 3 Standing
SC4XXX	Major Prescribe Elective (Choose within SC4xxx)	MPE	3	Year 3 Standing
SC4XXX	Major Prescribe Elective (Choose within SC4xxx)	MPE	3	Year 3 Standing
SC4XXX	Major Prescribe Elective (Choose within SC4xxx)	MPE	3	Year 3 Standing
XXXXXX	Broadening and Deepening Elective 2	BDE	3	
			15	
		Total AU for Graduation:	**140**	